AMSAT Weekly Satellite Report
Issue: WSR-219
Date: 2005-08-07
Sources: amsat-ans-2005-wsr-219.txt

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-219.S1
WSR 219 Part 1 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here
in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is

still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S2
WSR 219 Part 2 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS

BID: $ANS-219.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey

Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Clive Wallis wrote, "Very many thanks for all the recent reports of
OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news,
on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely
unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC,
and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the
experiment is still drawing current, but the other status bit indicates
thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost
approximately 15 days since 30 April. I'll be monitoring the clock
closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite
to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF
in the next 10 to 20 days. I would appreciate if listeners could just
make a note of the DATE & UTC time when they hear the satellite, so that
when it switches OFF we can determine when it was last heard. Please
post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but

NOT until it switches OFF!

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08072005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S3
WSR 219 Part 3 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in early 1994. Over the years, PO-28's primary usage has been commer-
cial, although plans have called for eventually shifting its operation to
ham radio use. G3WGM reports that following lengthy negotiations it has
been agreed that the satellite can be switched permanently to amateur
frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and
academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink
frequencies will be 435.250 and 435.275 MHz. More information on PO-28
is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change back
to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT
keps bulletins, but can be found at Celestrak in amateur.txt using the
name "POSAT". Users of Space Track should query the NORAD Satellite ID
number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's
information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====

LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:

```
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
```

Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S4
WSR 219 Part 4 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7,2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our

project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: August 1, 2005

Status: Onboard International Space Station

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communi-cations payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

The current mode available for amateur radio use activated on August 3 includes 1200 and 9600 baud telemetry on 437.975 +/- 9 KHz of Doppler shift. Conventional 1200 baud APRS IGate stations are encouraged to tune over to the downlink and feed anything you capture.

9600 baud capable stations are encouraged to capture the special 9600 baud downlink and email to PC2@grc.nasa.gov and if they have IGate

software (or the latest ALOGGER 2.0.2) to feed it live to:
satgate.aprsca.net port 20150. (ALOGGER2.02 is available from:
http://www.billdiaz.dynip.com/)

Please, no transmissions on the uplink. The PCSAT2 Team will announce
when the satellite is open for general use in a few weeks.

The PCSAT2 web pages are temporarily unavailable because the server at
the U.S. Naval Academy is without power for several days. When this
server is restored see:
http://web.usna.navy.mil/~bruninga/pcsat2.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60
seconds. 1200 baud stations can simply feed their downlinks directly
into the global APRS system like normal. These will help update the
LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

PCSAT2 was mentioned at SlashDot ...
http://science.slashdot.org/science/05/08/04/0053242.shtml?tid=160&tid=126

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

Tuning hints for doppler shift: At AOS the UHF signal from PCSAT2
will be as much as 9 KHz high and at LOS will be as much as 9 KHz
low. But at these times the doppler is *changing* the least and
this is probably the best time to catch a complete file without any
tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest
and although the signal will be strongest, over the center 2 minutes
the doppler will shift as much as 8 KHz! This is why we expect to
have to combine files from multiple users to get a complete set of
data.

[ANS thanks Bob, WB4APR, and Dave, G4DPZ for the above information]

[08072005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.

Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

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Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:

ans-editor{at}amsat.org
NNNN
/EX

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